

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A projection type display optical system, comprising:
 - a light source;
 - ~~DMD as an image display means~~ comprising a digital micromirror device which receives a light beam ~~emitting~~ emitted from the light source; and
 - an illumination unit installed in between the light source and the image display means, and comprising:
 - a rod lens operating as an optical device for unifying the brightness distribution of an incident light ray from the light source and emitting the brightness unified light ray;
 - a first lens for transmitting the emitted light ray ~~by~~ from the rod lens;
 - ~~a second lens~~ an optical element on which the transmitted light ray from the first lens incidents; and
 - a projection part for magnifying and projecting an image formed on the image display means onto a screen,
 - wherein the first lens and ~~second lenses~~ the optical element are set in such a manner that an optical axis of the ~~second lens~~ optical element and an optical axis of the first lens

are parallel but do not coincide with each other, whereby a surface image that is formed, when
an the emitted surface of light ray from the rod lens transmits is transmitted through the first and
second lens groups and the optical element, is not inclined to the surface of the image display means.

2. (Currently Amended) The projection type display optical system according to claim 1, wherein the optical axis of the second lens does not coincide with the optical axis of the first lens, and the second lens optical element is decentered with respect to the optical axis of the first lens, ~~whereby the surface image that is formed when the emitted surface of the rod lens transmits the first and second lens groups is not inclined to the surface of the image display means.~~

3. (Canceled).

4. (Currently Amended) The projection type display optical system according to ~~claim 3~~ claim 1, wherein the optical axis of the first lens coincides with a central axis of the rod lens.

5. (Canceled).

6. (Currently Amended) The projection type display optical system according to claim 1, wherein, if a light ray to the optical axis of the first lens is incident on the ~~second lens~~ optical element and emitted by the ~~second lens~~ optical element, an angle between the emitted light ray from the ~~second lens~~ optical element and the optical axis of the first lens is equal to an angle between an emitted light ray from the image display means in an on state and the emitted light ray from the ~~second lens~~ optical element.

7. (Currently Amended) The projection type display optical system according to ~~claim 3~~ claim 1, wherein the ~~second lens~~ optical element is a mirror type lens.

8. (Currently Amended) The projection type display optical system according to ~~claim 3~~ claim 1, wherein a reflection mirror for changing the light path of a light ray is installed in between the first lens and the ~~second lens~~ optical element.

9. (Currently Amended) The projection type display optical system according to ~~claim 3~~ claim 1, wherein the ~~second lens~~ optical element has an aspheric surface.

10. (New) The projection type display optical system according to claim 8, wherein the optical element includes a second lens.

11. (New) The projection type display optical system according to claim 2, wherein the optical element is decentered by being translated substantially perpendicularly with respect to the optical axis of the first lens.

12. (New) The projection type display optical system according to claim 1, wherein the surface image formed is substantially rectangular.

13. (New) The projection type display optical system according to claim 1, further comprising a color wheel having red, green, and blue colors in a predetermined sequence.

14. (New) The projection type display optical system according to claim 1, wherein the rod lens is a hollow lens whose inner surface is covered with a mirror.

15. (New) The projection type display optical system according to claim 1, wherein the rod lens is glass having a high index of refraction for internal reflection.

16. (New) A projection type display optical system, comprising:
a light source that generates light;
a digital micromirror device that selectively reflects portions of the light; and

a plurality of optical elements positioned between the light source and the digital micromirror device, wherein the light passes through the plurality of optical elements, and the plurality of optical elements project the light substantially normal onto a surface of the digital micromirror device so that the light substantially coincides with the surface area of the digital micromirror device.

17. (New) The projection type display optical system of claim 16, wherein the plurality of optical elements include:

a rod lens that receives the light from the light source, unifies the brightness distribution of the light, and emits a brightness unified light beam;

a first lens for transmitting the light beam received from the rod lens; and

a mirror for reflecting the light beam received from the first lens.

18. (New) The projection type display optical system of claim 17, wherein:

the rod lens and the first lens are positioned along their optical axes so that central axes of the rod lens and the first lens coincide; and

the mirror is positioned away from the optical axes of the rod and first lenses so that the central axis of the mirror does not coincide with the optical and central axes of the rod and the first lens.

19. (New) The projection type display optical system of claim 18, wherein the optical axes of the rod and first lenses and the central axis of the mirror are parallel.

20. (New) The projection type display optical system of claim 19, wherein the light projected unto the digital micromirror device forms thereon a substantially rectangular image.